

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,332	06/27/2001	Joseph Solus	0942.4250003	4572
20	7590 03/08/2002			
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W., SUITE 600 WASHINGTON, DC 20005-3934			EXAMINER	
			TUNG, JOYCE	
			ART UNIT	PAPER NUMBER
			1637	5
		DATE MAILED: 03/08/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

Applicant(s)

09/891,332

Solus et al.

Examiner

Joyce Tung

Art Unit



Responsive to communication(s) filed on		Joyce Tung	163/
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MALING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filled share in the main them made to the communication.  If the period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of the communication.  If the period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of communication.  Failure to reply within the set or extended period for reply lay will, by statute, cause the application to become ABANDONED (35 U.S.C. § 13. Any reply received by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any samely patent term adjustment. See 37 CFR 1.704(b).  Status  Status  1) Responsive to communication(s) filled on	The MAILING DATE of this communication appears	on the cover sheet with the corres	spondence address
HE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply septicide above is least than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  If NO period for reply is sepecified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of the considered timely.  If NO period for reply is sepecified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of fire reply the considered timely.  If NO period for reply is sepecified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of fire reply the considered timely filled, may reduce any search patent term adjustment. See 37 CFR 1.704(b).  Status  I) Responsive to communication(s) filed on	* *	TO EVEIDE 4 MONTH	V(C) 50044
atter SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  If the period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of the considered timely.  If MO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of the considered timely filed, may reduce any surred patent term adjustment. See 37 CFR 1.704(b).  Any reply received by the Officia later than three months after the mailing date of this communication, even if timely filed, may reduce any surred patent term adjustment. See 37 CFR 1.704(b).  This action is FINAL.  2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under £x parte Quayle, 1935 C.D. 11; 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-37, 39-42, and 52-68  is/are pending in the application.  4a) Of the above, claim(s) is/are withdrawn from consideration is/are ejected.  5) Claim(s) is/are withdrawn from consideration is/are ejected.  6) Claim(s) is/are objected to by the Examiner.  10) The drawing(s) filed on is/are objected to by the Examiner.  11) The proposed drawing correction filed on is/are objected to by the Examiner.  12) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a).  3) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a).  3) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(a).  3) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(a).  4) Molece of Dietraperson's Patent Dawing Review (PTO.948) 19() Molece of Informal Patent Application (PTO.152)	THE MAILING DATE OF THIS COMMUNICATION.		
be considered limely.  If NO period for reply is specified abova, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of the NO period for reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (3S U.S.C. § 13. Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any samed patent term adjustment. Sea 97 CFR 1.704(b).  Status	after SIX (6) MONTHS from the mailing date of this communic	cation.	•
Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 13.  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any samed patent term adjustment. Sea 37 CFR 1,704(b).  Status	be considered timely.  - If NO period for reply is specified above, the maximum statutory		•
Status    1)	<ul> <li>Failure to reply within the set or extended period for reply will, by</li> <li>Any reply received by the Office later than three months after the</li> </ul>	v statute, cause the application to bec	ome ARANDONED (35 U.S.C. & 133)
This action is FINAL. 2b   This action is non-final.  3  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.  Disposition of Claims  4  Claim(s) 1-37, 39-42, and 52-68			
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.   Disposition of Claims   4    Claim(s)   1-37, 39-42, and 52-68	1) Responsive to communication(s) filed on		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-37, 39-42, and 52-68	2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This act	tion is non-final.	
Solution   1-37, 39-42, and 52-68   is/are pending in the application.   is/are withdrawn from consideration   is/are withdrawn from consideration   is/are allowed.   is/are rejected.   is/are rejected.   is/are objected to.   is/are objected to papers   90		except for formal matters, prosec orte Quayle, 1935 C.D. 11; 453 (	cution as to the merits is O.G. 213.
day of the above, claim(s)   is/are withdrawn from consideration   is/are allowed.   is/are rejected.   is/are rejected.   is/are objected to.   objected to restriction and/or election requirement   objected to Papers   objected to by the Examiner.   objected to is objected to by the Examiner.   objected to objected to is objected to by the Examiner.   objected to objected to objected to by the Examiner.   objected to objected to objected to by the Examiner.   objected to ob			
Signate allowed.   Signate allowed.   Signate allowed.   Signate rejected.   Signate rejected.   Signate rejected.   Signate rejected.   Signate objected to.   Signate objected to.   Signate objected to.   Signate objected to.   Signate objected to restriction and/or election requirement   Signate objection   Signate objected to by the Examiner.   Signate objected to by the Examiner.   Signate objected objected	4) 💢 Claim(s) <u>1-37, 39-42, and 52-68</u>	is/are	pending in the application.
Claim(s)			
The proposed drawing correction filed on is/are objected to by the Examiner.	5) Claim(s)		is/are allowed.
Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on	6)  Claim(s)		is/are rejected.
Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are objected to by the Examiner.  11) The proposed drawing correction filed on is: a) approved b) disapproved.  12) The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. § 119  13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  a) All b) Some* c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).			
10) The specification is objected to by the Examiner.  10) The drawing(s) filed on	8) 🗓 Claims <u>1-37, 39-42, and 52-68</u>	are subject to restric	tion and/or election requirement.
10) The drawing(s) filed on	Application Papers		
The proposed drawing correction filed on	—		
The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. § 119  13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  a) All b) Some* c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).	10/010		
Priority under 35 U.S.C. § 119  13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  a) All b) Some* c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).			b) $\square$ disapproved.
Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  a) All b) Some* c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  Notice of References Cited (PTO-892)  18) Interview Summary (PTO-413) Paper No(s).  19) Notice of Informal Patent Application (PTO-152)	12) $\sqcup$ The oath or declaration is objected to by the Exami	ner.	
a) All b) Some* c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  Acknowledgements of References Cited (PTO-892)  18) Interview Summary (PTO-413) Paper No(s).  19) Notice of Informal Patent Application (PTO-152)			
1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  Attachment(s)  5) Notice of References Cited (PTO-892)  18) Interview Summary (PTO-413) Paper No(s).  19) Notice of Informal Patent Application (PTO-152)		iority under 35 U.S.C. § 119(a)-	(d).
2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  *Ittachment(s)  5) Notice of References Cited (PTO-892)  18) Interview Summary (PTO-413) Paper No(s).  19) Notice of Informal Patent Application (PTO-152)			
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  *Ittachment(s)  5) Notice of References Cited (PTO-892)  18) Interview Summary (PTO-413) Paper No(s).  19) Notice of Informal Patent Application (PTO-152)	and promy doddinants have		
*See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  Attachment(s)  5) Notice of References Cited (PTO-892)  18) Interview Summary (PTO-413) Paper No(s).  19 Notice of Informal Patent Application (PTO-152)			
Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  Attachment(s)  5) Notice of References Cited (PTO-892)  18) Interview Summary (PTO-413) Paper No(s)	application from the international Bures	au (PCT Rule 17,2(a)).	this National Stage
Statechment(s)  5) Notice of References Cited (PTO-892)  18 Interview Summary (PTO-413) Paper No(s).  6) Notice of Draftsperson's Patent Drawing Review (PTO-948)  19 Notice of Informal Patent Application (PTO-152)			e).
6) Notice of Draftsperson's Patent Drawing Review (PTO-948)  19) Notice of Informal Patent Application (PTO-152)			
6) Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper N	lo(s)

Application/Control Number: 09/891,332 Page 2

Art Unit: 1637

## **DETAILED ACTION**

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1637.

## Election/Restriction

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-2, 5-33, and 66 drawn to a method and left for identifying or typing a polymorphic DNA fragment in a sample of DNA with one or more DNA polymerase substantially reduced in the ability to add one or more non-templated nucleotides to the 3' terminus of DNA molecule, classified in class 435, subclass 91.2.
  - II. Claims 3 and 4, drawn to a method of cloning a DNA molecule, classified in class 435, subclass 320.1.
  - III. Claims 34-37, 39-42 and 53-57, drawn to a polymerase and vector to produce the polymerase, classified in class 424, subclass 94.1.
  - IV. Claim 52, drawn to a mutant *Tne* DNA polymerase, classified in class 435, subclass 183.
  - V. Claims 58-60, drawn to a method to synthesize a nucleic acid molecule, classified in class 435, subclass 91.2.

Application/Control Number: 09/891,332 Page 3

Art Unit: 1637

- VI. Claim 61-65 and 67-68, drawn to a method and kit of sequencing a DNA molecule, classified in class 435, subclass 91.2.
- V. Claim 66, drawn to a method of amplifying a double stranded DNA molecule, classified in class 435, subclass 91.2.
- 2. The inventions are distinct, each from the other because of the following reasons: Inventions III- IV and I-II and V-VII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product, Groups III-IV, can be used to produce antibody, while Groups I-II and V-VII can be used with a different polymerase.
- 3. Inventions I-II and V-VII are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention has separate utility such as Group I is for identifying polymorphic DNA fragment, Group II is for cloning a DNA molecule, Group V is for synthesizing a DNA molecule, Group VI is for sequencing DNA molecule and Group VII is for amplifying DNA molecule. See MPEP § 806.05(d).
- 4. Inventions III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different

Application/Control Number: 09/891,332 Page 4

Art Unit: 1637

inventions, Group III is drawn to a polymerase which is mutated to reduce the ability to add non-templated 3' nucleotides to a synthesized nucleic acid molecule, while Group IV is drawn to mutant *Tne* DNA polymerase protein. Thus, they have different function.

- 5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 6. A telephone call was made to Mr. Brian J. Del Buono on 2/25/2002 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

- 7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).
- 8. The drawings are approved.
- 9. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Joyce Tung whose telephone number is (703) 305-7112. The examiner can normally be reached on Monday-Friday from 8:00 AM-4:30 PM.

Application/Control Number: 09/891,332

Page 5

Art Unit: 1637

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached at (703) 308-1119 on Monday-Friday from 10:00 AM-6:00 PM.

Any inquiries of a general nature or relating to the status of this application should be directed to the Chemical/Matrix receptionist whose telephone number is (703) 308-0196.

10. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Art Unit 1656 via the PTO Fax Center located in Crystal Mall 1 using (703) 305-3014 or 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Joyce Tung

March 1, 2002

GARY BENZION, PH.D

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 1600°